

POPOV, Konstantin, inzh.

The most important tasks of electric power engineering in 1965.
Elektroenergiia 15 no.12:1-2 D '64.

1. Chairman, Committee for Electric Power Engineering and Fuel,
Sofia.

POPOV, Konstantin, inzh.

The heat and power complex Maritsa-Iztok, a new stage in the development of Bulgaria. Elektroenergiia 13 no.5/6:1-2 My-Je '62.

1. Zam. predsedatel na Komiteta po promishlenostta, chlen na Redaktsionnata kolegiia, "Elektroenergiia."

POPOV, K.

A case of Cohn's syndrome. Suvr. med. 13 no.4:48-49 '62.

1. Iz Okruzhnata bolnitsa v Stara Zagora (Glaven lekar M. Dimov).

(HYPERALDOSTERONISM)

POPOV, K.

Density of bales and its influences on certain indexes in the
straw harvesting with the balers. Izv mekh selsko stop BAN
1:89-98 '61. ,

POPOV, Krum

Sorbic acid, a new medium for preserving canned food.
Khim i industriia 34 no.1:24-26 '62.

Popov, K

BULGARIA / Chemical Technology. Chemical Products and H
Their Application. Ceramics, Glass, Bind-
ing Materials. Betches. Glass.

Abs Jour: Ref Zhur-Khimiya, No 9, 1959, 32197.

Author : Popov, K.

Inst : Not given.

Title : Ground Enamel for Sanitary Articles.

Orig Pub: Leka prom-st, 1958, 7, No 4, 19-23.

Abstract: No abstract.

Card 1/1

POPOV, Khr.; PARASKOV, Tsv.

On a method of determining the coefficient of internal friction
during the vibration of solids. Godishnik mash elekt 7 no.1:
39-48 '60. (publ. '61)

POPOV, Kirill (Sofiya)

Application of the thermodynamic equations of irreversible
processes to the systems with one disappearing component.

Zhur.fiz.khim. 36 no.5:1062-1065 My '62. (MIRA 15:8)
(Chemistry, Physical and theoretical)

FOPCV, Konstantin, inzh.

On the more rational and more economical utilization of electric power. Elektroenergiia 13 no.1:1-2 Ja '62.

1. Zam.-predsedatel na Komiteta po promishlenosti.

BERCHEV, Kr.; POPOV, K.

Studies on tumors according to autopsy and biopsy material observed during 20 years in the department of pathological anatomy of the Higher Medical Institute in Sofia. Nauch. tr. vissh. med. inst. Sofia 40 no.5:141-148 '61.

1. Predstavena ot prof. B. Kurdzhiev, rukovoditel na katedrata po patologichna anatomia.

(NEOPLASMS statist)

POPOV, K.A.

117-5-58-2/24

AUTHOR: Popov, K.A. Engineer

TITLE: Automation of the Cold Forging Process (Avtomatizatsiya protsessa kholodnoy shtampovki)

PERIODICAL: Mashinostroitel', 1958, Nr 5, pp 4-7 (USSR)

ABSTRACT: Sixty per cent of all parts in the automobile industry are produced on cold die presses. For the sake of higher efficiency, the Gor'kovskiy avtozavod (Gor'kiy Automobile Plant) has developed a system of mechanization and automation of this process. An apparatus has been made for preliminary greasing, feeding and inserting of a metal sheet and also for the removal of the stamped part. It can be moved from one press to another. As is shown in figure 1, it consists of a sliding frame with a holding device, pulverizer, a narrow gauge track and a carriage. The apparatus is equipped with an electric system consisting of a switchboard, a control stand, switches and electro-pneumatic valves. Figure 2 shows the arrangement of the various mechanisms such as the feeder, the rack and pinion gear, the frame work, the pick-up device with suction cups and the 5 control switches. Figure 3 gives a diagram of the electric installation on the mechanism includ-

Card 1/2

Automation of the Cold Forging Process

117-58-5-2/24

ing the intermediate relays for the inserting and removing mechanism. Figure 4 shows the arrangement of the removing mechanism or stripper which consists of a carriage moving on a horizontal rail and equipped with electro-pneumatic valves and a pneumatic cylinder which operates the stripper. The output of the installation is the same as that of a press working on an automatic cycle. There are 4 figures.

AVAILABLE: Library of Congress
Card 2/2 1. Forging presses-Automation

POPOV, K.A.
POPOV, K.A.

Mechanizing the feed of blank and the removal of finished stampings.
Avt. prom. no.1:33-35 Ja '58. (MIRA 11:2)

1. Gor'kovskiy avtozavod.
(Sheet-metal work)

POPOV, K. F.

POPOV, K. F. - "Introduction to Pediatrics." Sub 15 Dec 52, Second
Moscow State Medical Inst imeni I. V. Stalin. (Dissertation
for the Degree of Doctor in Medical Sciences).

SO: Vechernaya Moskva January-December 1952

POPOV, Kosta

Lithiasis of upper urinary tracts in Sumadiji. Srpski
arh. celok. lek. 85 no.1:50-56 Jan 57.

1. Hirursko odeljenje Opste bolnice "dr. Mihajla Ilica"
u Kragujevcu. Sef: prim. dr. Sreten Krasic. Urolosko
odeljenje Opste bolnice "dr. Mihajla Ilica" u Kragujevcu
Sef: dr. Kosta Popov.

(URINARY TRACT, calculi
statist., in Yugosl. (Ser))

POPOV, K.

Kabakov, A.; Popov, K. Computing the short circuit of currents in electric systems. P. 5. ELEKTROENERGIJA, Sofia. Vol. 6, no. 5, 1966.

SO: Monthly List of the East European Accessions, (SOAL), LC. Vol. 4, no. 10, Oct. 1966. Incl.

POPOV, K.

Use of 2, 4-D in sowing Sudan grass and foxtail millet. p. 217
GODISHNIK Vol. 48, no. 1, 1952-53-1953-54 (Published 1955)
Sofiya, Bulgaria

SOURCE: EEAL, Vol 5, no. 7, July 1956

POPOV, K.

Tasks of our infant electric industry. p. 1.

Vol. 6, no. 9, Sept. 1955
ELEKTROENERGIJA
Sofiya. Bulgaria

So: Eastern European Accession Vol. 5 No. 4 April 1956

POPOV, K.

POPOV, K. Whey as food for fattening pigs. p. 24. Vol. 11, no. 11, Nov. 1956
KOOPERATIVNO ZEME DELIE. Sofia, Bulgaria.

SOURCE: E_st European Accessions List (EEAL) vol. 6 no. 4 April 1957

POPOV, K.; BERCHIV, K.

~~Analysis of 10,000 biopsy findings.~~ *Suvren med., Sofia*
4 no.9:20-32 1953. (CML 25:5)

1. Communication I. 2. Of the Institute of General Pathology
and Pathological Anatomy (Head --Prof. Kurdzhiyev), V. Chervenkov
Medical Academy. Sofia.

POPOV, K.; PARASKOV, B.

POPOV, K.; PARASKOV, B. Production of green chromium dyes for enameled products.

Vol. 5, No. 10, 1956.

LEKA PROMISHLENOST.

TECHNOLOGY

Sofia, Bulgaria

So: East European Accession, Vol. 6, No. 3, March 1957

РПРП, К.

Ранов, К. Tasks and organization of the Scientific Research Institute for
Electrification and the Electric Industry of the Ministry of Electrification
p.20. ELEKTROSTROYENIE. Sofia. Vol. 1, no. 1, Jan. 1955.

SO: Monthly List of East European Accessions. (REAL), LD. Vol. 4, no.
10, Oct. 1955. Uncl.

POPOV, K.

Popov, K. Twelfth Session of the Committee on Electric Power at the
Economic Commission for Europe of the United Nations. p. 45.
ELEKTROENERGIJA. Sofiya. Vol. 6, no. 3/4, Mar./Apr. 1955.

SO: Monthly List of the East European Accessions, (SEAL), LC. Vol. 4,
no. 10, Oct. 1955. Uncl.

POPOV, KA.

Andrey
~~Organization of Accounting at the Kuznetsk Combine. S. G.~~
~~Kozlov and K. A. Popov (Stat. 1959, 3, 462-469)~~
~~(In Russian). The accounting systems used in the ore mines,~~
~~the sinter and blast furnaces plants, the steel-melting shops,~~
~~the rolling mills and auxiliary plant are described with~~
~~special reference to the influence of productivity and quality~~
~~on payments. -- S. K.~~

MM

RACHEV, L.; STATEVA, S.; POPOV, K.P.; ANTOVA, V.; DAMIANOVA, M.

Toxicity of biological products from infants afflicted with toxicosis. Suvrem.med., Sofia 7 no.11:3-11 1956.

1. Iz Katedrata po detski bolesti pri VMI-Sofia (Zav. katedrata: prof. L. Rachev) i Katedrata po patologichna anatomia (Zav. katedrata: prof. B. Kurdzhiev).

(INFANT NUTRITION DISORDERS,

tox. of blood & cerebrospinal fluid isolated from inf. & inject. in mice (Bul))

PCPCV, KH.

"Establishing the amortization standard for the railroad tracks in view of the increased railroad traffic."

TRANSPORTNO DELO., Sofia, Bulgaria., Vol. 11, No. 1, 1959

Monthly list of EAST EUROPEAN ACCESSIONS (EEAI), LC, Vol. 8, No. 7, July 1959, Unclass

POPOV, KH.

Determining the constant load of steel bridges. (To be cont'd.) P. 21.
STROTELSTVO. (Ministerstvo na stroezhite) Sofiya. Vol. 1, no. 2/3,
1954

SOURCE: East European Accessions List, (EEAL), Library of Congress
Vol. 4, No. 12, December 1955

POFOV, KH.

Determination of the constant load of steel bridges. (Conclusion) p. 18

STROITELSTVO. Vol. 1, No. 4/5, 1954

Sofia, Bulgaria

So. East European Accessions List Vol. 5, No. 9 September, 1956

FOR V, 3.

Substance of commercial contracts in railroad transportation. P. 50

TRANSPORTING DATA. Vol. 8, No. 1, 1956

Sofia, Bulgaria

So. East European Accessions List Vol. 5, No. 9 September, 1956

Paper, B. Flushing creek at Fort Belvoir, Mont. p.
THE GEOLOGICAL Society, Vol. 4, no. 3, 1865.

50: Monthly List of the East European Association, (CEAE), LC. Vol. 4, no. 10, Oct. 1955. Uncl.

POPOV, Kh.

"Finishing Pure Wool Cheviots." p. 15,
(LEKA PROMISHLENOST, Vol. 3, No. 1, 1954, Sofiya, Bulgaria)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4
No. 5, May 1955, Uncl.

PEPOV, Kh.

Finishing carded material from merino wool. p. 8.
LEKA PROMISHLENOT, Sofiya, Vol. 4, no. 3, 1955.

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4, no. 10, Oct. 1955,
Uncl.

POFOV, KH.

"Model windows with miscellaneous standardized parts" (p.3) ARHITEKTURA I STROITELSTVO
(Ministerstvo na stroezhite i putishtata, Ministerstvo na komunalnoto stozhanstvo i
blagoustroistvoto, i Nauchno tekhnicheskia suisus) Sofiya Vol 3 No 12 1953

SO: East European Accessions List Vol 2 No 7 Aug 1954

POPOV, KH.

"Contemporary methodology of architectural projection." (p.6)

ARKHITEKTURA I STROITELSTVO

(Ministerstvo nastroezhite i putishtata, Ministerstvo na komunalnoto stopanstvo i blagoustroistvoto, i Naushno tekhnicheskiye sili z) Sofiya Vol 3 No 10 1953

SO: East European Accessions List Vol 2 No 7 Aug 1954

POPOV, Khr.

Sub-bulbar duodenal ulcer. Khirurgiia, Sofia 9 no.5:408-415
1956.

(PEPTIC ULCER,
duodenal sub-bulbar (Bul))

POPOV, Kosta, Dr.

Foreign bodies in bladder of males. Med. glasn. 10 no.3:114-116
March 56.

1. Khirurgshko odel'en'e opshte bolnitse Dr. Mikhajla Ilic u
Kragujevtsu. (Upravnik dr. S. Krasic).

(BLADDER, foreign bodies

in males, causes & surg. (Ser))

(FOREIGN BODIES,

in bladder of males, causes & surg. (Ser))

POPOV, Kosta; NIKOLIC, Milan

Urology in the Medical School of Alexandria. Med. glasn.
10 no.4-5:206-207 Apr-May 56.

(UROLOGY, hist.
in Ancient Egypt (Ser))

POPOV, Kosta, dr.

Recent views on chronic prostatitis. Med. glas. 16 no.5:223-226
My '62.

1. Urolosko odeljenje Sreske bolnice u Somboru (Nacelnik: dr Kosta
Popov)

(PROSTATITIS)

23

Popov, K. A.

Sampling cross-sections of K. A. Popov and A. N. Hartmann. 3rd Collection of Articles of the Inst. of Materials of People's Commissariat of Communications (Moscow) Issue 8/112, 5-12(1920).--The method of drawing samples and a specially constructed sampling device are described in detail. A. A. RORITLINGER

ASB-35A METALLURGICAL LITERATURE CLASSIFICATION

22

POPOV, K. A.

ANALYZING CREOSOTE OIL. K. A. POPOV. 3rd Collection of Articles of the Inst. of Materials of Peoples Commissariat of Communications (Moscow) Issue 8/112, 13 39 (1929). - This investigation was undertaken for the purpose of establishing standards for creosote oils used to impregnate railroad ties. Creosote oils from different sources were fractionated and individual fractions so obtained were examd. for their action on various organisms that attack wood. The following conclusions pertaining to the fractional distn. of creosote oil are made: the cut below 205° should not exceed 8-10% and the final b. p. should not exceed 355°, while soft pitch should not exceed 25%. Not more than 0.5% of free C is permissible.

A. A. BOBITLINGK

ASB-314 METALLURGICAL LITERATURE CLASSIFICATION

POPOV, K.A., professor; NIKIFOROV, Yu.N., inzhener, laureat Stalinskoy
premi; TIMOFEYEVA, O.G.

Investigation of a method of deep impregnation of wooden boards by
means of a preliminary injection. Trudy TSNIS MPS no.9:154-164 '53.
(Wood--Preservation) (MLRA 8:1)

POPOV, Konstantin, inzh.

Main tasks of electric-power engineering in 1964. Elektroener-
giia 15 no.1:1-2 Ja'64

1. Predsedatel na Komiteta po energetika i gorivata.

ZHURAVLEV, G.P.; KHOROSHILOV, I.F.; POPOV, K.A.

Methodology problems in labor productivity accounting. Stal' 16
no.11:1032-1034 N '56. (MIRA 10:1)

1. Novo-Tagil'skiy metallurgicheskiy zavod (for Zhuravlev). 2. Zavod
"Azovstal'" (for Khoroshilov). 3. Kuznetskiy metallurgicheskiy kombi-
nat (for Popov).

(Metallurgical plants--Accounting)

KROPACHEV, N.G.; POPOV, K.A.

Transition to business accounting methods at the Kuznetsk Plant.
Stal' 16 no.5:452-459 My '56. (MLRA 9:8)

1. KuznetSKIY metallurgicheskiy kombinat.
(Kuznetsk--Metallurgical plants)

PEEV, Mikho; PETEV, Dimitur; POPOV, K.

A test for determining the effect of the complex mechanization of wheat harvesting. Izv mekh selsko stop BAN 1:233-246 '61.

1. Chlen na Redaktsionnata kolegiia, "Izvestiia na Tsentralnii nauchnoizsledovatel'ski institut po mekhanizatsiia i elektrifikatsiia na selskoto stopanstvo" (for Peev and Petev).

POPOV, K.

Experience in delaying sprouting of potatoes by preservation with a
Bulgarian chemical preparation. p. 173
GODISHNIK Vol 48, no. 1, 1952-53-1953-54 (Published 1955)
Sofiya, Bulgaria

SOURCE: EEAL, Vol 5, no. 7, July 1956

KALOIANOV, A.; POPOV, K.

Possibilities of gathering the cereal crops in the mountainous
and semimountainous regions with combines. Izv mekh selsko
stop BAN 1:99-114 '61.

POPOV, K.

SCIENCE

Periodical: GODISHNIK Vol. 50, no. 1, 1955/56 (published 1957)

POPOV, K. Influence of thiocarbamide on old and fresh dug potatoes with roots.
p. 161.

Monthly List of East European Accessions (EEAI), LC. VOL. 8, No. 2
February 1959, Unclass.

POPOV, K.; GEORGIEV, G.

Changes in the amino acid content of cut potato tubers after treatment with thiocarbamide. Izv Inst biol BAN 11:5-45 '61.
(EEAI 10:9)

(Amino acids) (Potatoes) (Thiourea)

POPOV, K.

Investigation of the relative antibiotic actions of ranunculaceous plants. R. Docheva-Popova and K. Popov. *Gosizdatkhoz' Uzb.*, Biol.-Geol.-Geograf. Fak. No. 1-Biol. 48, 41-54 (1953-54) (Pub. 1955).—The wheat germination test was used to det. the antibiotic activity of the oils extd. from several local and foreign Ranunculaceae. In general, different parts of a plant showed different activity and the localization of the activity varied from plant to plant. The antibiotic effect of the leaves depended on their age, the most effective ones being com- ely developed. The activity of the fruits diminished as they ripened. The activity of cut leaves also diminished even when stored in a humid atm. The following plants were examd.: most effective: *Clematis flammula*, *C. recta*, *Ranunculus arvensis*, and *Anemone pulsatilla*; mildly active: *R. acer*, *R. acer* var. *lyricus*, *Anemone japonica*, *R. sardous* var. *lavis*, *R. sardous* var. *mediterraneus*, *C. fremonti*; weakly active: *R. brutius*, *R. retusus*, *R. ficaria*, *C. vitalba*; *R. rebens*, *C. integrifolia*, and *R. polyanthus*. G. H. M.

2

POPOV, KYRILL

Popoff, Kyrille. Über die verallgemeinerten Ableitungen, die durch ein Iterationsverfahren gebildet sind. Abh. Preuss. Akad. Wiss. Math.-Nat. Kl. 1942, no. 2, 19 pp. (1942).

The author applies smoothing processes analogous to the Hölder and Cesàro summability methods to the difference quotient in order to obtain a generalized derivative. Given $f(x)$, let $D_0(u) = \Delta_0(u) = [f(x+u) - f(x)]/u$, $\epsilon_0(u) = 1$, $D_{n+1}(u) = u^{-1} \int_0^1 D_n(t) dt$, $\Delta_{n+1}(u) = \int_0^1 \Delta_n(t) dt$, $\epsilon_{n+1}(u) = \int_0^1 \epsilon_n(t) dt$. The Hölder derivative of order n is $\lim_{u \rightarrow 0} D_n(u)$ and the Cesàro derivative is $\lim_{u \rightarrow 0} \Delta_n(u)/\epsilon_n(u)$. It is shown that, if the Hölder derivative of order n exists, then the Cesàro derivative of order n is equal to it. The converse is proved under the assumption that $\liminf_{u \rightarrow 0} D_0(u)$, $\limsup_{u \rightarrow 0} D_0(u)$ are finite. The classical formulas hold for the generalized derivatives of the sum of two functions, for the product if one factor is continuous, for the quotient if the denominator is continuous, and for $F(f(x))$ if the classical derivative F' is continuous. L. W. Cohen (Lexington, Ky.).

Source: Mathematical Reviews,

Vol 8 No 6

2

CA

The fundamental theorem of Nernst and the theory of
real gases. Kh. A. Fagay. *Annales chim. Phys., Faculté
Sci., Liège 1, 48, 137-51 (in French, 1950-51) (1949-50).*—The
Nernst theorem is valid for real gases if $p_v = RT^3 \cdot a$
is used ($a = a$ small pos. quantity) for T near zero, and the
condition $\lim_{T \rightarrow 0} C_v = 0$ requires that a be pos. for p near zero.
Data are given for He, H₂, Ne, N₂, and Ar. Khity Lus.

1957

CA

2

A critical review of definitions of the absolute zero. Kiril
A. Popov. *Annuaire univ. Sofia, Faculté sci., Livre 1*, 49,
415-25 (1948-49) (French summary).—All definitions lead
to the concept of infinity for $T = 0$. Kitty Lus

1957

CA

2

(The impossibility of obtaining absolute zero. Kiril A.
Popov. *Annuaire univ. Sofia, Faculté sci., Livre I*, 45.
427-34 (in French, 435-7) (1948-49).—A review. K. L.

1957

POPOV, Kiril A.

Popov, Kiril A. On the motion of the earth around its center of gravity. Doklady Akad. Nauk SSSR (N.S.) 69, 755-758 (1949). (Russian)

The equations of Poisson: $d\theta/dt = -m \cos(\psi + l_0)$, $d(\psi + l_0)/dt = n + m \cot \theta \sin(\psi + l_0)$, giving the influence of the solar attraction on the earth's rotation, may be transformed by substituting $x = \sin \theta \sin(\psi + l_0)$, $y = -\sin \theta \cos(\psi + l_0)$, $z = \cos \theta$, $dt = ndt$. Then the new variables satisfy integral equations of Volterra's type and rapid convergence is ensured if the following units are used: the sun's mass, the sun-earth distance and the mean solar day.

H. Jurdetzkij (New York, N. Y.).

Handwritten signature

Vol 11 No. 4

POPOV, Kiril, uchitel

For a creative implementation of practical lessons in the
educational and experimental field. Biol i khim 7 no. 2:
46-50 '64.

1. First Elementary School, Sandanski.

POPOV, Kiril

USSR/Mathematics - Laplace Transforms 1 Jul 51

"Theory of Linear Differential Equations," Kiril Popov, Act Mem, Bulgarian Acad Sci, Sofia, Bulgaria

"Dok Ak Nauk SSSR" Vol LXXIX, No 1, pp 17-20

Besides the classical methods of integration of differential eqs, there also exist others, e. g., the method based on the Laplace transform. These methods do possess the generality of the classical methods, but they clarify difficulties from their new approach. Popov discusses a method that permits one to carry out integration in the classical

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USSR/Mathematics - Laplace Transforms 1 Jul 51
(Contd)

cases and that opens new perspectives. He considers the system of 2d order: $x' = ax+by+c$, $y' = kx+ly+m$, where a, b, c, k, l, m are functions of t . Submitted by Acad S. N. Bernshteyn 10 May 51.

210749

2

CA

Thermodynamics of irreversible processes. Kiril A. Popov (Univ. Sofia, Bulgaria). *Z. angew. Math. u. Phys.* 3, 42-51 (1952). —Math. The reciprocal relations derived by Onsager (*C.A.* 26, 2901) and Casimir (*Rev. Mod. Phys.* 17, 343 (1945)) from the probability theory are obtained in a more general form by use of Newtonian mechanics.
George M. Murphy

POPOFF, KYRILLE

Mathematical Reviews
Vol. 15 No. 2
Feb. 1954
Mathematical Physics

(2)
Popoff, Kyrille. Sur la thermodynamique des processus
irréversibles. Bulgar. Akad. Nauk Izvestiya Mat. Inst.
1, 111-126 (1953). (Bulgarian. French summary)

POPOV, K

1971. **POPOV, K.** On the thermodynamics of irreversible processes (in French), *Zh. fiz. i matemat. nauk*, 1971, 1, 87-88; Jan. 1971, 134.
The state of a system is determined by n variables $X_i = \xi_i - \xi_i^*$, $i = 1, 2, \dots, n$, where the ξ_i^* correspond to equilibrium conditions. The entropy difference, correct through second-order terms, between the actual state and the equilibrium state is

Papov, K.

✓ 1218. Papov, K., The mathematical foundations of the theory of
irreversible thermodynamical processes, Soviet Phys. (JETP) 1,
2, 336-353, Sept. 1955. (Consultants' Bur. Translation)

Phys 2

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POPOV; K.

8

✓ Popoff, Kyrille. Sur la thermodynamique des processus irréversibles. Z. Angew. Math. Phys. 6 (1955), 378-386.

This is a continuation of a rather long series of papers by the author dealing with the observation that the phenomenological relations of irreversible thermodynamics are first integrals of a system of second-order differential equations of the type $d^2x_i/dt^2 = X_i$, with the X_i

linear functions of the x_i . This installment treats processes for which the temperature and pressure remain constant and the results are applied, in particular, to the theory of phase. G. Newell (Providence, R.I.).

Don
Rett

POPOV, KIRIL
USSR/Physics - Thermodynamics

FD-1541

Card 1/1 Pub. 146-1/25

Author : Popov, Kiril

Title : ~~Mathematical principles governing the theory of irreversible thermodynamic processes~~
Mathematical principles governing the theory of irreversible thermodynamic processes

Periodical : Zhur. eksp. i teor. fiz. 28, 257-282, March 1955

Abstract : The author shows that Onsager's relation $\dot{x}_i = \sum L_{ik} X_k$ ($i = 1, 2, \dots, n$; $k = 1$ to n ; $L_{ik} = L_{ki}$), when the terms are limited to the second degree in x , is the first integrals of the more general system of differential equations $d^2 x_i / dt^2 = X_i$ ($i = 1, 2, \dots, n$). In the most general, with preservation of the terms in the expansion of ΔS , he obtains $L_{ik} = L_{ki}$ with an accuracy up to terms of the second order. He applies the developed theory to a study of the phenomena of thermal conduction and theory of phases in adiabatically closed systems. He thanks K. Shaposhnikov for help in rendering the manuscript into Russian. Eight references; e.g. Kyrille Popoff, C. R., 238, 646, 1952.

Institution: Bulgarian Academy of Sciences, Sofia

Submitted : January 8, 1954

POPOV, K.A.

538.755

✓ 6582. A FUNDAMENTAL EQUATION IN THE THEORY OF
IRREVERSIBLE THERMODYNAMIC PROCESSES. K.A. Popov.
Dokl. Akad. Nauk SSSR, Vol. 106, No. 3, 422-4 (1956). In
Russian.

phys A discussion and proof of Denbigh's equation for the rate
of increase of entropy in various natural processes in systems
whose state is completely determined by a single variable; the
various forms of the equation are deduced for adiabatic pro-
cesses, for isothermal isobaric processes, and for isothermal
processes involving heat exchange with the surrounding medium,
but no performance of external work. R.C. Murray

AUTHOR: Popov, Kirill (Bulgarian) SOV/76-32-7-28/45

TITLE: On the Application of the Thermodynamics of Irreversible Processes to Phase Theory (O prilozhenii termodinamiki neobratimyykh protsessov k teorii faz) The Case of Two Components in Two Phases at Constant Temperature and Pressure (Sluchay dvukhkompontentnoy dvukhfaznoy sistemy, nakhodyashcheyssya pri postoyannykh temperature i davlenii)

PERIODICAL: Zhurnal fizicheskoy khimii, 1958, Vol. 32, Nr 7, pp 1638-1647 (USSR)

ABSTRACT: The system H_2O-CO_2 is investigated on the conditions mentioned above in two phases, liquid - gas. Proceeding from the state of the thermodynamic equilibrium in the closed isothermal-isobaric system the author satisfies the phenomenological correlation according to Onsager (Ref 2) and then investigates the simplified case where the first liquid phase consists of the solution of CO_2 in H_2O and the gaseous phase of the vapor-steam mixture H_2O and CO_2 . The first phase can always be regarded as a diluted solution of CO_2 in H_2O , whereas the second phase may be a diluted solution of CO_2 in H_2O , a diluted solution of steam in CO_2 , or a gaseous mixture of

Card 1/2

SOV/76-32-7-28/45

On the Application of the Thermodynamics of Irreversible Processes to Phase Theory. The Case of Two Components in Two Phases at Constant Temperature and Pressure

H_2O and CO_2 . A number of mathematical derivations and differential equations are given on this basis, which represent the states of equilibrium as well as their possibility of calculation. Among other things some virtual transformations in the first phase of the system are considered together with physical and mathematical conditions, e.g., the interaction of one mole H_2O and one mole CO_2 under the formation of one gram-ion of HCO_3^- and one gram-ion of H^+ . There are 4 references.

ASSOCIATION: Bolgarskaya Akademiya nauk, Sofiya (Bulgarian Academy of Sciences, Sofia)

SUBMITTED: March 26, 1957

1. Carbon dioxide-water systems--Phase studies 2. Liquids--Thermodynamic properties
3. Gases--Thermodynamic properties 4. Pressure
5. Temperature--Chemical effects

Card 2/2

POPCV, K.A., polkovnik meditsinskoy sluzhby; SVERDLOV, A.K., podpolkovnik
meditsinskoy sluzhby

Dispensary treatment and expert examination of servicemen following
Botkin's disease. Voen.-med.zhur. no.11:20-22 '64. (MIRA 18:5)

BARAKS, Aleksandr Markovich; NIKIFOROV, Yuriy Nikolayevich; POPOV,
K.A., prof., retsenzent; KOLOMNIN, G.P., inzh., red.

[Deep impregnation of wood by the use of incisions] Glu-
bokaia propitka drevesiny putem primeneniia nakolov. Mo-
skva, Izd-vo "Lesnaia promyshlennost'," 1964. 155 p.
(MIRA 17:5)

VLASOV, V.A., professor; OSINOVSKIY, N.I.; POPOV, K.F.; TITOVA, A.I.;
YEGOROVA, N.S., red.; GABERLAND, M.I., tekhn.red.

[Textbook of children's diseases for students in the department
of therapy of medical institutes] Uchebnik detskikh boleznei
dlia studentov lechebnykh fakul'tetov meditsinskikh institutov.
Pod red. V.A. Vlasova. Moskva, Gos.izd-vo med. lit-ry, 1958.
511 p. (MIRA 12:1)

(CHILDREN--DISEASES)

POPOV, K.F., prof.

Polyclinical preparation of students of medical institutes.
Pediatrriia 38 no.12:81-85 '60. (MIRA 14:2)
(MEDICINE—STUDY AND TEACHING)

SOROKIN , G.M.; OLEYNIK, I.P., doktor ekon. nauk; RYABUSHKIN, T.V., doktor ekon. nauk; DUDINSKIY, I.V., kand. ekon. nauk; MIROSHNICHENKO, B.P., kand. ekon.nauk; SERGEYEV, V.P., kand. ekon. nauk; TARNOVSKIY, O.I., kand. ekon. nauk; STOROZHEV, V.I., kand. ist. nauk; KONOVALOV, Ye.A., kand. ekon. nauk; GERTSOVICH, G.B., kand. ekon. nauk; POPOV, K.I., kand. ekon. nauk, red.; ZEVIN, L.Z., red.; NIKOLAYEV, D.N., red.; PAK, G.V., red.; GERASIMOVA, Ye.S., tekhn. red.

[The building of communism in the U.S.S.R. and cooperation among the socialist countries] Stroitel'stvo kommunizma v SSSR i sotrudnichestvo sotsialisticheskikh stran. Pod obshchei red. G.M.Sorokina. Moskva, Ekonomizdat, 1962. 334 p. (MIRA 16:2)

1. Akademiya nauk SSSR. Institut ekonomiki mirovoy sotsialisticheskoy sistemy. 2. Chlen-korrespondent Akademii nauk SSSR (for Sorokin).

(Communist countries--Foreign economic relations)

POPOV, Kiril A.

Jules Henri Poincaré, 1854-1912; on the occasion of the
50th anniversary of his death. Fiz mat spisanie BAN
5 no.3:213-217 '62.

IVANOV, G.S, kand.tekhn.nauk; BLYAKHMAN, Yu.M., inzh.; POPOV, K.A.,
tekhnik

Automatic programmed regulator for autoclaves. Transp.stroi.
12 no.7:36-39 J1 '62. (MIRA 16:2)
(Automatic control) (Autoclaves)

REMOVED



Effect of 2,4-D on the growth of *Andropogon saccharatum*
var. *sudanense* and *Setaria italica*. K. Iord, Popov and P.

Nachev. *Godishnik Sofiiskiya Univ., Biol.-Geol.-Geograf.*
Vol. No. 1-Biol. 48, 217-22 (1953-54) (Pub. 1955).—The
application of 1, 2, and 4% 2,4-D solus. was made when
Andropogon and *Setaria* were 10-20 cm. and 20-50 cm. tall,
resp. (in June). *Chenopodium album* and *Sinapis arvensis*
were the most abundant weeds. The weeds were reduced
by as much as 65% relative to hand weeding. G. H. M.

2

POPOV, K. I.

Agriculture

(Principal field crop pests of the Tartar A.S.S.R. and measures against them)
Kazan', Tatgosizdat, 1950.

Monthly List of Russian Accessions, Library of Congress, July 1952. UNCLASSIFIED

RUZINOV, P., kand. sel'skokhoz. nauk; POPOV, Kh., kand. ekonom. nauk

Principles of material incentive in plant protection. Zashch. rast.
ot vred. i bol. 10 no.2:12-13 '65. (MIRA 18:4)

1. Donskoy sel'skokhozyaystvenny institut.

POPOVA, Ya.; POPOV, Khr.; ILIYEVA, Ml.

Quantitative method of determining vitamin B₁₂ by thin-layer chromatography. Prikl. biokhim. i mikrobiol. 1 no. 6:693-696 N-D '65. (MIRA 18:12)

1. Vysshiy institut pishchevoy promyshlennosti, Plovdiv, Bolgariya. Submitted July, 1965.

19

ck

Introduction of semiacid refractories in reheating furnaces of the Stalin New Kramatorsk Machine Works. K. I. Potov, *Ogneupory* 7, 141 (1950). Semiacid quartz-clay brick (sand:clay = 1:1) showed satisfactory service in a reheating furnace during 4 months in one case and over 6 months (still working) in another case and is preferred to grog brick. R. K. Stefanowsky

ASB SLA METALLURGICAL LITERATURE CLASSIFICATION

1ST AND 2ND LETTERS																										3RD AND 4TH LETTERS																										5TH AND 6TH LETTERS																										7TH AND 8TH LETTERS																									
A B C D E F G H I J K L M N O P Q R S T U V W X Y Z																										A B C D E F G H I J K L M N O P Q R S T U V W X Y Z																										A B C D E F G H I J K L M N O P Q R S T U V W X Y Z																										A B C D E F G H I J K L M N O P Q R S T U V W X Y Z																									
Popov, K. I. Firing done by the "black briquet" method. <i>Ognespory</i>, 2 [10] 27 31 (1934). The experience of the cement industry on firing briquetted mixtures of clay with lime-stone and coal in automatic shift kilns was taken as a starting point. The possibility of effective use of this method for firing clay to grog in the refractories industry was investigated. Kaolin and Platikhaki clay were taken for the experiments, and anthracite, anthracite on 100 mesh (cm.² screen) were taken as fuel. The mixture had a water content of 10% and was briquetted by the Kuhl method at a pressure of 5 to 30 kg./cm.² The briquettes were fired at S.C.E. 14 in a reducing atmosphere. The coal burned out completely. The water absorption of the briquettes was 13.2 to 11.6%. The lightness of briquettes fell from 0.5 to 1 S.C.E. The investigation has a preliminary character and was carried out under laboratory conditions.																																																																																																							

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AUTHOR INDEX										SUBJECT INDEX										MATERIAL INDEX										CLASSIFICATION																													
<i>R</i> Paper, K. L. INTRODUCTION OF SEMIACID REFRACTORIES IN REHEATING FURNACES OF THE STALIN NEW KAMA TONK MACHINE WORKS. <i>Ogonyor, 7</i> (2-3) 141-43 (1930) —The use of semiacid refractories in reheating furnaces instead of grug brick showed their superiority over the latter. The brick were composed of 50% Chasov-Yar clay and 50% quartz sand.																																																											
1ST AND 2ND LETTER										3RD AND 4TH LETTER										5TH AND 6TH LETTER										7TH AND 8TH LETTER																													

CIA-RDP86-00513R0013423

med Retardation of growth of potatoes in storage with local chemical preparations. K. Yord. Popov and G. Khr. Georgiev. *Godishnik Sofiiskiia Univ. Biol.-Geol.-Geograf. Fak. Kniga 1-Biol.* 48, 173-98(1953-54)(Pub. 1955).—The sprouting of potatoes was effectively retarded by the use of a powder contg. 25 mg. methyl α -naphthylacetate in 1 g. kaolin. The effective dosage was 2 g. of this powder per 1 kg. of potatoes. G. H. Meguerian

2

POPOV, K.I., prof.

Institute of Biology and its contribution to the development of biological science in Bulgaria; in commemoration of the 15 years since September 9, 1944 and 12 years since the establishment of the institute. Izv Inst biol BAN 10:3-25 '60. (EEAI 10:4)

1. Direktor na Instituta po biologiya "M.Popov"
(BULGARIA--BIOLOGY)

SHAMSUTDINOVA, K.G., kand.sel'skokhoz.nauk; POPOV, K.I., kand.biolog.nauk

Effect of early (April) sowing of spring wheat on its susceptibility
to pests and diseases. Zashch. rast. obozr. i bol. 8 no.1:24-25 Ja
'63. (MIRA 16:5)

1. Kazanskiy sel'skokhozyaystvennyy institut.
(Tatar A.S.S.R.—Wheat—Disease and pest resistance)
(Planting time)

POPOV, Kh.

Effect of barium oxide and barium sulfide on the viscosity of
synthetic blast-furnace slags. Trudy LPI no.225:102-135 '64.

GLIK, E.V.; POPOV, Kh.; MANCHINSKIY, V.G.

Viscosity of melts in the system $\text{BaO} - \text{SiO}_2 - \text{Al}_2\text{O}_3$. Trudy LPI
no.225:136-142 '64. (MIRA 17:9)

POPOV, K.I., kand.biolog.nauk

One should not underestimate cultivation practices as a control
method. Zashch. rast. ot vred. i bol. 7 no.2:10-11 F '62.
(MIRA 15:12)

1. Kazanskiy sel'skokhozyaystvennyy institut.
(Plants, Protection of)

PARASKOV, Tsv. N.; POPOV, Khr. I.

A method of obtaining phase space of mechanical oscillating systems with a degree of freedom. Godishnik mash elekt 12 no. 1:81-88 '62 [publ. '63].

POPOV, K.; MAKEDONSKA, Tsv.

Wheat blades turning yellow in the dark; in relation to the drought-resistance of the sort. Izv Inst biol BAN 10:27-57 '60.

(EEAI 10:4)

(WHEAT)

Popov, Khr.

REV. P.

ATANASOVA, S.
SURNAME (in caps); Given Name

Country: Bulgaria

Academic Degrees: not indicated

Affiliation: not indicated

Source: Sofia, *Khizhienn*, No 2, Mar/Apr 61, pp 25-26

Date: "Sh. Dysenteriae 3 Have Been Separated for the First Time
in Bulgaria."

Co-authors:

RAYKOV, P., Sofia
BOZAKOV, Zdr.
POPOV, Khr.
NETCHEVA, El.
CHICHEV, P.

POPOV, Kiril, inzh.

Multiprofiled abrasive instruments for thread grinding.
Tekh delo 500; 3 24N '63.

POPOV, Kiril At.

SURNAME (in caps); Given Names

Country: Bulgaria

Academic Degrees: Academician

Affiliation: not indicated

Source: Sofia, Matematika i Fizika, No 2, Mar/Apr 61, pp 54-55

Data: "The Late Professor Atanas Vidulov TINTEROV."
(Based on the memoirs of Engineer Sava Atanasov TINTEROV,
Professor Tinterov's son)

POPOV, Kiril, inzh.

It is necessary to standardize the rules and norms for safekeeping, use, and rendering safe abrasive instruments. Ratsionalizatsiia 14 no.6:27-30 '64

1. NIPKIMMI.

POPOV, Kiril, inzh., nauchen sutrudnik; OBRESHKOV, P., k.t.n., nauchen sutrudnik

Abrasive materials and tools for sharpening wood-cutting instruments.
Durvomebel prom 7 no.6:1-5 N-D '64.

1. Scientific Research Institute for the Design, Development,
and Manufacture of Metal-Cutting Machines and Instruments.

POPOV, K. I., Candidate of Agric Sci (diss) -- "The effect of field-protecting forest strips on the microclimate and harvest under conditions of irrigated agriculture in the Kuybyshev trans-Volga region". Moscow, 1957. 19 pp (Acad Sci USSR, Inst of Forestry), 170 copies (KL, No 21, 1959, 118)

Country : USSR
Category: Forestry. Forest Cultures.

K

Abs Jour: RZhBiol., No 11, 1958, No 48795

Author : Popov. K.I.

Inst : -

Title : The Effect of the Field-Sheltering Forest Strips
on the Micro-Climate and Yield Under the Conditions
of the Irrigation Farming.

Orig Pub: Lesn. kh-vo, 1957, No 12, 37-40

Abstract: No abstract.

Card : 1/1

ACC NR: AP6031522

SOURCE CODE: UR/0292/66/000/009/0021/0023

AUTHOR: Meyerovich, Ye. A. (Engineer); Palastin, L. M. (Candidate of technical sciences); Platonov, A. M. (Candidate of technical sciences); Popov, K. K. (Engineer); Serebryanik, L. B. (Engineer); Sobolev, I. S. (Engineer); Syzrantsev, V. I. (Engineer);

ORG: none

TITLE: Disk-type brushless synchronous generator

SOURCE: Elektrotehnika, no. 9, 1966, 21-23

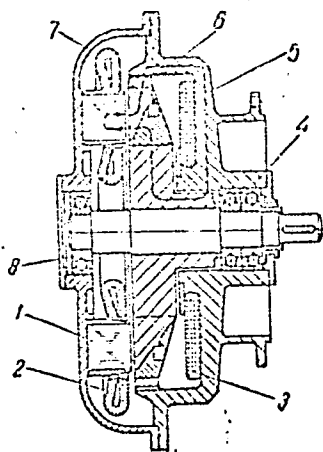
TOPIC TAGS: synchronous generator, electric machine, brushless generator, electric generator, magnetic circuit

ABSTRACT: A general description of a new design (Author's Certificate 169656, Bull. izobr., 1965, no. 7) of disk-type synchronous generator (see figure) is presented; the generator was developed at VNIEM. This design is an improvement over a previous "externally-closed-magnetic-circuit" construction (VZP). Design features and some characteristics of both are compared. These conclusions are offered: (1) The new design has a smaller weight and axial length than other types of brushless synchronous generators; (2) The new rotor has high mechanical strength;

Card 1/2

UDC: 621.313.322

ACC NR: AP6031522



its poles are not subjected to bending forces (as is the case in claw-type construction); (3) The new construction is stiff and has good heat removal and ventilation conditions. "Cand. Techn. Sc. G. N. Fridman, Engineers Ye. V. Kel'tseva, E. I. Sagalov, V. P. Pyatkov, N. I. Shcherbakov, S. K. Eytminovich, and others took part in developing the design and manufacturing practices of the new generator." Orig. art. has: 6 figures and 1 table.

SUB CODE: 09 / SUBM DATE: none / ORIG REF: 002 / OTH REF: 004

Card 2/2

POPOV, K.K., dotsent; KALITINA, Z.I.

Development of the lancet fluke on grazing lands of the
northern slopes of the Central Caucasus and eastern Cis-
caucasia. Uch. zap. SOGPI 26 no.2:63-80 '64.

(MIRA 19:1)